

1/103

Figure 1

AAGGAGCACC ACGAAAACGC CCCAACTGGT GGGCGGTAGG CCGTGAGGGG TTCTTGTCTG TAGTGGGCGA
GAGCCGGGTG CATGACAAACA AAGTTGGCCA CCAACACACT GTTGGGTCCT GAGGCAACAC TCGGACTTGT
TCCAGGTGTT GTCCACCCGC CTTGGTGGTG GGGTGTGGTG TTTGAGAACT GGATAGTGGT TGCAGGCATC
AATGGATACG CTGCCGGCTA GCGGTGGCGT GTTCTTTGTG CAATATTCTT TGGTTTGTGT TGTGT

(SEQ ID NO 76)

2/103

Figure 2

AAGGAGCACC ACGAAAAGCA CCCCACACGG TGGGGTGCGA GCCGTGAGGG GTTCCCCTCT GTAGTGGACG
GGGGCCGGNT GCGCAACAGC AATGATGCG CAGACACACT ATTGGGCCCT GAGACAACAC TCGGTCCGTC
CGTGTGGAGT CCTCCATCT TGGTGGTGG GTGTGGTGT TGAGTATTGG ATAGTGGTTG CGAGCATCTA
GATGAGCGCA TGGTCTTCGT GGCCGGCGTT CATCGAAATG TGTAATTCT TCCTTAACTC TTGTGTGT

(SEQ ID NO 77)

3/103

Figure 3

AAGGAGCACC ACGAAAAGCA CCCCAACTGG TGGGGTGCGA GCCGTGAGGG GTTCCCCTCT GTAGTGGACG
GGGGCCGGGT GCGCAACAGC AATGATTGC CAGACACACT ATTGGGCCCT GAGACAACAC TCGGTCCGTC
CGTGTGGAGT CCTCCATCT TGGTGGTGG GTGTGTGTT TGAGTATTGG ATAGTGGTTG CGAGCATCTA
GATGAGCGCA TGGTCTTCGT GGCCGGCGTT CATCGAAATG TGTAAATTCT TTTTAACTC TTGTGTGT

(SEQ ID NO 78)

Figure 4

AAGGAGCACC	ACGAAAAGCA	CTCCAATTGG	TGGGGTGCGA	GCCGTGAGGG	GTTCCCCGTCT	GTAGTGGACG
GGGGCCGGNT	GCACAAACAGC	AAATGATTGC	CAGACACACT	ATTGGGCCCT	GAGACAACAC	TCGGTCGATC
CGTGTGGAGT	CCCTCCATCT	TGGTGGTGGG	GTGTGTGTT	TGAGTATTGG	ATAGTGGTTG	CGAGCATCTA
GATGAGCGCA	TAGTCCCTGT	GGCTGATGCG	CTCGTCGAAA	TGTGTAATTT	CTTCTTTGGT	GTNTGTGTGT

(SEQ ID NO 79)

5/103

Figure 5

AAGGAGCACC ACGAAAAGCA TCCCAATTGG TGGGGTGCGA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG
AAAACCGGGT GCACAACAGC AATGATTGC CAGACACACT ATTGGGCCCT GAGACAACAC TCGGTCGATC
CGTGTGGAGT CCCTCCATCT TGGTGGTGGG GTGTGGTGTT TGAGTATTGG ATAGTGGTTG CGAGCATCTA
GATGAGCGCG TAGTCCCTTG TGGCTGATGC GTTCATCAAA ATGTGTAATT TCTTTTITGG TTTNTGTGTG

T

(SEQ ID NO 80)

6/103

Figure 6

AAGGAGCACC ACGAAAAGCA CTCCAATTGG TGGGGTGCGA GCCGTGAGGG GTTCCCGTCT GTAGTGGACG
GGGGCCGGGT GCACAACAGC AAATGATTGC CAGACACACT ATTGGGCCCT GAGACAACAC TCGGTCGATC
CGTGTGGAGT CCCCTCATCT TGGTGGTGCG GTGTGGTGTT TGAGTATTGG ATAGTGGTTG CGAGCATCTA
GATGAGCGCA TAGCCCTTGC GGCTGATGCG TTCGNCGAAA TGTGTAATTT CTTCCTCTGGT TTCTGTGTGT

(SEQ ID NO 81)

7/103

Figure 7

AAGGAGCACC ACGAAAAGCA CTCCAATTGG TGGGGTGCGA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG
GNAGCCGGGT GCACAAACAGC AAATGATTGC CAGACACACT ATTGGGCCCT GAGACAACAC TCGGTCGATC
CGTGTGGAGT CCTCCATCT TGGTGGTGGG GTGTGGTGTG TGAGTATTGG ATAGTGGTTG CGAGCATCTA
GATGAGCGCG TAGTCCTTCG TGGCTGATGC GTTCATCGAA ATGTGTAATT TCTTCTTTGG TTTTGGGTGT

GT

(SEQ ID NO 82)

8/103

Figure 8

AAGGAGCACC ACGAAAAGCA CTCCAATTGG TGGGGTGCGA GCCGTGAGGG GTTCCCGTCT GTAGTGGACG
GGGGCCGGGT GCACAACAGC AATGATCGC CAGACACACT ATTGGGCCCT GAGACAACAC TCGGTCGATC
CGTGTGGAGT CCTCCATCT TGGTGGTGGG GTGTGGTGTT TGAGTATTGG ATAGTGGTTG CGAGCATCTA
GATGAGCGCA TAGTCCCTTTG GGGCTGATGT GTTTCATCAA AATGTGTAAT TTCTTTTNG GTTTTNGTGT

GT

(SEQ ID NO 83)

9/103

Figure 2

AAGGAGCACC ACGAAAAGCA CTCCAATTGG TGGGGTGCGA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG
GGAGCCGGGT GCACAACAGC AAATGATTGC CAGACACACT ATTGGGCCCT GAGACAACAC TCGGTCGATC
CGTGTGGAGT CCCCTCATCT TGGTGGTGGG GTGTGGTGTT TGAGTATTGG ATAGTGGTTG CGAGCATCTA
GATGAGCGCG TAGTCCTTCG TGGCTGATGC GTTCATTGAA ATGTGTAATT TCTTCTCTGG TTTTGTGTG

T

(SEQ ID NO 84)

10/103

Figure 10

AAGGAGCACC ACGAAAAGCA CTCCAATTGG TGGGGTGCGA GCCGTGAGGG GTTCCCCGTCT GTAGTGGACG
GGGGCCGGGT GCACAACAGC AATGATTGC CAGACACACT ATTGGGCCCT GAGACAACAC TCGGTCGATC
CGTGTGGAGT CCTCCATCT TGGTGGTGGG GTGTGGTGT TGGATATTGG ATAGTGGTTG CGAGCATCTA
GATGAGCGCA TAGTCCTTGT GGCTGATGCC CTCGTCGAAA TGTGTAATT CTTCTTTGGT TTTTGTGTGT

(SEQ ID NO 85)

11/103

Figure 11

AAGGAGCACC ACGAAAAGCA CTCCAATTGG TGGGGTGCGA GCCGTGAGGG GTTCCCGTCT GTAGTGGACG
GGGGCCGGGT GCGCAACAGC AAATGATTGC CAGACACACT ATTGGGCCCT GAGACAACAC TCGGTCGATC
CGTGTGGAGT CCTCCATCT TGGTGGTGGG GTGTGGTGT TTGAGTATG GATAGTGGTT GCGAGCATCT
AGATGAGCGC GTAGTCCTTG TGGCTGATGC GTTCGTCGAA ATGTGTAATT TCCTCTTTGG GTTTTGTGT

GT

(SEQ ID NO 86)

12/103

Figure 12

AAGGAGCACC ACGAAAAGCA CCCCAAATTGG TGGGGTGCGA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG
GNAGCCGGNT GCGCAACAGC AATGATTGC CAGACACACT ATTGGGCCCT GAGACAACAC TCGGNCGATC
CGTGTGGAGT CCTCCATCT TGGTGGTGGG GTGTNGTGTT TGAGTATTGG ATAGTGGTTG CGAGCATCTA
GATGGGCGCG TAGTCCTTG TGA CTGATGC GTTCATCAAA ATGTGTAATT TCTTTTGTGN NTTNGTGTG

T

(SEQ ID NO 87)

13/103

Figure 13

AAGGAGCACC ACGAAAAGCA CTCCAATTGG TGGGGTGCGA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG
GGAACCGGGT GCACAACAGC AATGATTGC CAGACACACT ATTGGGCCCT GAGACAACAC TCGGTCGATC
CGTGTGGAGT CCTCCATCT TGGTGGTGG GTGTGGTGGT TGAATATTGG ATAGTGGTTG CGAGCATCTA
GATGAGCGCA TAGTCCCTTG TGGCTGACGC GTTCATCGAA ATGTGTAATT TCTTCTTTGG TTTTGTGTG

T

(SEQ ID NO 88)

14/103

Figure 14

AAGGAGCACC ACGAAAAGCA CTCCAATTGG TGGGGTGCGA GCCGTGANGG GTTCCCCTCT GTAGTGGACG
GGGGCCGGGT GCACAACAGC AAATGATTGC CAGACACACT ATTGGGCCCT GAGACAACAC TCGGTCGATC
CGTGTGGAGT CCCTCCATCT TGGTGGTGGG GTGTGGTGTG TGAGTATTGG ATAGTGGTTG CGAGCATCTA
GATGAGCGCA TAGTCCTTAG GGCTGATGCG TTCGTCGNAA TGTGTAATTT CTTCTTTGGT TTTTGTGTGT

(SEQ ID NO 89)

15/103

Figure 15

AAGGAGCACC ACGAAAAGCA TCCCAATTGG TGGGGTGCGA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG
AAACCCGGGT GCACAACAGC AAATAATTGC CAGACACACT ATTGGGCCCT GAGACAACAC TCGGTCGATC
CGTGTGGTGT CCTCCATCT TGGTGGTGGG GTGTGGTGT TGAATAATGG ATAGTGGTTG CGAGCATCTA
GATGAACGCG TAGTCCCTTCG TGGCTGACGT GTTCATCGAA ATGTGTAATT TCTTNTNTTA ACTCTTGTGT

GT

(SEQ ID NO 90)

16/103

Figure 16

AAGGAGCACC ACGAAAAGCA CCCCAAATTGG TGGGGTGCGA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG
GGAGCCGGGT GCACAACAGC AAATGATTGC CAGACACACT ATTGGGCCCT GAGACAACAC TCGGTCAGTC
CGTGTGGTGT CCCTCCATCT TGGTGGTGGG GTGTGGTGTT TGAGTATTGG ATAGTGGTTG CGAGCATCTA
GATGAACGCG TAGTCCCTTGT GACTGACGTG TTCATCGAAA TGTGTAATTT CTTTCTTAAC TCTTGTGTGT

(SEQ ID NO 91)

17/103

Figure 17

AAGGAGCACC ACGAAAAGCA CTTCAATTGG TGAAGTGCGA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG
AAAGCCGGGT GCACAACAGC AATGATTGC CAGACACACT ATTGGGCCCT GAGACAACAC TCGGTCGAAC
CGTGTGGAGT CCTCCATCT TGGTGGTGG GTGTGGTGT TGAATATTGG ATAGTGGTTG CGAGCATCTA
GATGAACGCG TGGTCTTCAT GGCCGGCGTG TTCATCGAAA TGTGTAATAT CTTCTCTGGT TTTCGGTGTG
T

(SEQ ID NO 92)

18/103

Figure 18

AAGGAGCACC ACGAAAAGCA CTTCAATTGG TGAAGTGCGA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG
AAAACCGGNT GCACAAACAGC AAATGATTGC CAGACACACT ATTGGGCCCT GAGACAACAC TCGGTCGATC
CGTGTGGAGT CCTCCATCT TGGTGGTGGG GTGTGGTGT TGAATATTGG ATAGTGGTTG CGAGCATCTA
GATGAACGCG TGGTCTTCAT GGCCGGCGGTG TTCATCGAAA TGTGTAATTT CTTTTTNNAC TCTTGTGTGT

(SEQ ID NO 93)

19/103

Figure 12

AAGGAGCACC ACGAAAAGCA CTTCAATTGG TGAAGTGCGA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG
AAAGCCGGGT GCACAACAGC AAATGATTGC CAGACACACT ATTGGGCCCT GAGACAACAC TCGGTCGAAC
CGTGTGGAGT CCCTCCATCT TGGTGGTGGG GTGTGGTGT TTAGTATTGG ATAGTGGTTG CGAGCATCTA
GATGAACGCG TGGTCTTCAT GGCCGGCGTG TTCATCGAAA TGTGTAATT CTTCTTTGGT TTTNGTGTGT

(SEQ ID NO 94)

20/103

Figure 20

AAGGAGCACC ACGAAAAGCA CTTCAATTGG TGAAGTGCGA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG
AAAACCGGGT GCACAACAGC AATGATTGC CAGACACACT ATTGGGCCCT GAGACAACAC TCGGTCGATC
CGTGTGGAGT CCCTCCATCT TGGTGGTGGG GTGTGGTGTG TGAGTATTGG ATAGTGGTGG CGAGCATCTA
GATGAACGCG TAGTCCTTCC NGGNCNGCGT GTTCATCGAA ATGTGTAATT TCNTNTNTAA CTCTNGTGTG

T

(SEQ ID NO 95)

21/103

Figure 21

AAGGAGCACC ACGAAAAGCA TCCCAATTGG TGGGGTGTTGA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG
AAAACCGGGT GCACAACAGC AAATGATGTC CAGACACACT ATTGGGCCCT GAGACAACAC TCGGTCGATC
CGTGTGGAGT CCTCCATCT TGGTGGTGG GTGTGGTGT TGAATATTGG ATAGTGGTTG CGAGCATCTA
GATGAACGCG TAGTCCTTCG GGGCCGGCGT GTTCATCGAA ATGTGTAATT TCTTTTTTAA CTCTTGTGTG

T

(SEQ ID NO 96)

22/103

Figure 22

AAGGAGCACC ACGAAAAGCA CTTCANTTGG TGAAGTGCGA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG
AAAACCGGGT GCACAACAGC AAATGATTGC CAGACACACT ATTGGGCCCCCT GAGACACAC TCGGTCGAAC
CGTGTGGAGT CCCCTCCATCT TGGTGGTGGG GTGTGGTGTT TGAGTATTGG ATAGTGGTTG CGAGCATCTA
GATGAACGCG TGGTCTTCAT GGCCGGCGTG TTCATCGAAA TGTGTAATTT CTTCTTTAAC TCTTGTGTGT

(SEQ ID NO 97)

23/103

Figure 23

AAGGAGCACC ACGAAAAGCA CTTCAATTGG TGAAGTGCGA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG
AAAACCGGGT GCACAACAGN AATGATTGC CAGACACACT ATTGGGCCCT GAGACAACAC TCGGTCGATC
CGTGTGGAGT CCTCCATCT TGGTGGTGG GTGTGTTGTT TGAGTATTGG ATAGTGGTTG CGAGCATCTA
GATGAACGCG TGGTCTTCAT GGCCNGCGTG TTCATCGAAA TGTGTAATTT CTTTTTTAAC TCTTGTGTGT

(SEQ ID NO 98)

24/103

Figure 24

AAGGAGCACC ACGAAAAGCA CTTCAATTGG TGAAGTGCGA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG
AAAACCGGGT GCACAACAGC AAATGATTGC CAGACACACT ATTGGGCCCT GAGACAACAC TCGGTCGATC
CGTGTGGAGT CCTCCATCT TGGTGGTGGG GTGTGGTGTT TGAGTATTGG ATAGTGTTG CGAGCATCTA
GATGAACGCG TGGTCTTCAT GGCCGGCGTG TTCAATCGAA TGTGTAATT CTTTTTAAC TCTTGTGTGT

(SEQ ID NO 99)

25/103

Figure 25

AAGGAGCACC ACGAAAAGCA CCCCAACCTGG TGGGGTGCGA GCCGTGAGGG GTCCCTCGCCT GTAGTGGGCG
GGGGCCGGGT GCACAACAGC AATGATTGC CAGACACACT ATTGGGCCCT GAGGCAACAC TCGGCTCGTT
CTGAGTGGTG TCCCTCCATC TTGTTGGTGG GGTGTGGTGT TTGAGTATTG GATAGTGGTT GCGAGCATCT
AAACGGATGC GTGGCCGGCA ACGTGGCGT GTTCGTTGAA ATGTGTAATT TCTTTTTFGG TTTTGTGTG

T

(SEQ ID NO 100)

26/103

Figure 26

AAGGAGCACC ACGAAAAGCA TCCCAACAAG TGGGGTGCAA NCCGTGAGGG GTTCTCGTCT GTAGTGGACG
AAAGCCGGGT GCACGACAAC AAGCAAAGCC AGACACACTA TTGGGTCCCTG AGGCAACACT CGGGCTCTGT
TCGAGAGTTG TCCCACCATC TTGGTGGTGG GGTTGGTGTG TTGAGAATTG GATAGTGGTT GCGAGCATCA
AATGGATGCG TTGCCCCTACG GGAGCGTGT TCTTTTGTGC AATTTATTTC TTTGGTTTTT GTGT

(SEQ ID NO 101)

27/103

Figure 27

AAGGAGCACC ATTTCCCAGT CGATGAACTA GGGAACATAA AGTAGGCATC TGTAGTGGAT ATCTACTTGG
TGAATATGTT TTGTAAATCC TGTCCACCCC GTGGATGGGT AGTCGGCAAA ACGTCGGACT GTCATAAGAA
TTGAAACGCT GGCACACTGT TGGGTCCTGA GGCAACACGT TGTGTTGTCA CCCTGCTTGG TGGTGGGGTG
TGGACTTTGA CTTCTGAATA GTGGTTGCCA GCATCTAAAC ATAGCCTCGC TCGTTTTTCGA GTGGGGGCTGG
TTTTCGAATT TTA

(SEQ ID NO 102)

28/103

Figure 28

AAGGAGCACC ATTCCCAGT CGGATGAACT AGGGAACATA AAGTAGGCAT CTGTAGTGGG TATCTACTTG
GTGAATATGT TTTGTAAATC CTGTCCACCC CCGTGGATGG GTAGTCGGCA AACGTCGGA CTGTCATAAG
AATTGAAACG CTGGCACACT GTTGGGTCCT GAGGCAACAC GTTGTGTTGT CACCCCTGCTT GGTGGTGGGG
TGTGGACTTT GACTTCTGAA TAGTGGTTGC GAGCATCTAA ACATAGCCCTC GCTCGTTTTC GAGTGAGGCT
GGTTTTTGCA ATTTTA

(SEQ ID NO 103)

29/103

Figure 29

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AAGGAGCACC ACGAAGAGCA CTCCAATTGG TGGGTGCGA GCCGTGAGGG GTCATCGTCT GTAGTGGACG
AAGACCGGGT GCACGACAAAC AAGCTAAGCC AGACACACTA TTGGGTCCCTG AGGCAACACC CTCGGGTGCT
GTCCCCCCAT CTTGGTGGTG GGGTGTGGTG TTTGAGAAAT GGATAGTGGT TGCAGGCATC AAAATGTATG
CGTTGTCGTT CTCGGCAACG TGTCTTTT GTGCAATT TA TTTTGGT TTTGTAAGTGT TTGT
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(SEQ ID NO 104)

30/103

Figure 30

AAGGAGCACC	ACGAAGAGCA	CTCCAATTGG	TGGGGTGCGA	GCCNGAGGG	GTCATCGTCT	GTAGTGGACG
AAGACTGGGT	GCACGACAAC	AAAGCAAGCC	AGACACACTA	TTGGGTCCTG	AGGCAACACC	CTCGGGTGCT
GCCCCCTCCAT	CTTGGTGGTG	GGGTGTGGTG	TTTGAGAACT	GGATAGTGGT	TGCGAGCATC	AAAAATGTAT
GCGTTGTCGT	TCGCGACAAC	GTGTTCTTTT	TGTGCAATT	TAAATCTTTT	GGTTTGGTA	GTGTTTGT

(SEQ ID NO 105)

31/103

Figure 31

AAGGAGCACC ACGAGAAGCA CTCCAATTGG TGGGGTGCAA GCCGTGAGGG GTCATCGTCT GTAGTGGACG
AAGACCGGGT GCACGACAAC AAGCAAGCC AGACACACTA TTGGGTCCCTG AGGCAACACC CTCGGGTGCT
GTCCCCCAT CTTGGTGGTG GGGTGTGGTG TTTGAGAACT GGATAGTGGT TCGGAGCATC AAAATGTATG
CGTTGTCGTT CGCGGCAACG TGTTCTTTT GTGCAATTTT TATTCTTTGG TTTTGTAGT GTTTGT

(SEQ ID NO 106)

32/103

Figure 32

AAGGAGCACC ACGAAAAGCA CCCCAATTGG TGGGGTGCAA GCCGTGAGGG GTTCCCGCCT GTAGTGGGCG
GGGCCGGGTG CGCAACAGCA AATGATTGCC AGACACACTA TTGGGCCCTG AGGCAACACT CGGATCGATT
GAGTGCTTGT CCCCCATCT TGGTGGTGCG GTGTGTGTT TGAGAACTGG ATAGTGGTTG CGAGCATCTA
AATGAACGCA CTGCCGATGG TGGTGTGTTT GTTTTGTA ATTTTATTCT TTGGTTTGTG TGTGTGT

(SEQ ID NO 107)

33/103

Figure 33

AAGGAGCACC ACGAAAAGCA CTCCAATTGG TGGGGTCCGA GCCGTNAGGG GTTCTCGTCT GTAGTGGATG
GCAGCCGGGT GCACANCAGC AAATGATTGC CAGACACACT ATTGGGCCCT GAGACAACAC TCGGTCAGTC
CGTGTGGAGT CCCTCCATCT TGGTGGTGGG GTGTGGNGTT TGAGTATTGG ATAGTGGTGG CGANCACTA
GATGAACGGG TAGTCCTCNG TGGCTGACGT GTTCATCAAA ATGTGTAATT TCCTTTTANGG GTTNGGTGT
CT

(SEQ ID NO 108)

34/103

Figure 34

AAGGAGCACC ACGAAAAGCA CTCCAATTGG TGGGGTGCGA GCCNGAGAGG GTTCTCGCCT GTAGTGGNCG
AGGGCCGGAT GCACAACAAC ACATGATTGC CAGACACACT ATTGGGCCCT GANACAACAC TCGGCCAGTC
CGTGTGGTGT CCTCCATCT TGGTGGTGGG GTGTGGTGT TGAATATNGG ATAGTNGTTG NGANCATCTA
AACGGCTGCG TNGNCNNGAA CGGTGGCGTG TTCGNTAAA TGTGTAATTT CTTTNNNGGT TTGGGTGTNT

(SEQ ID NO 109)

35/103

Figure 35

AAGGAGCACC ACGAAAAGCA CTCCAATTGG TGGGGTGCGA GCCGTGAGGG GTTCTCGCCT GTAGTGGGCG
ANGGCCGGGT GCACAACAAC AATGATTGC CAGACACACT ATTGGGCCCT GAGACAACAC TCGGCCAGTC
CGTGTGGTGT CCCNCCATCT TGGTGGTGG GTGTGTGTT TGAGTATTGG ATAGTGGTTG CGAGCATCTA
AANGGNTGCG TTGCCGNNAN CNGTGGCGTN TTCGNTAAA TGTGTAANTT CTTTTTNGGT TTGTGTGTGT

(SEQ ID NO 110)

36/103

Figure 36

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ATCGAAGATC CCGGCTTCTT CATAAGCTCC CACACGAATT GCTTGATTCA CTGGTTAGAC GATTGGGTCT
GTAGCTCAGT TGGTTAGAGC GCACCCCTGA TAAGGGTGAG GTCGGCAGTT CGAATCTGCC CAGACCCACC
AATTGTTGGT GTGCTGCGTG ATCCGATACG GGGCCATAGC TCAGCTGGGA GAGCGCCTGC TTTGCACGCA
GGAGGTCAGG AGTTCGATCC TCCTTGGCTC CACCATCTAA AACAA'CGTC GAAAGCTCAG AAATGAATGT
TCGTGGATGA ACATTGATTT CTGGTC'TTTG CACCAGAACT G'TT'CT'T'AAA AATTCGGTA TGTGATAGAA
GTAAGACTGA ATGATCTCTT TCACTGGTGA TCA'TTCAAGT CAAGGTAAAA TTTGCGAGTT CAAGCGCGAA
TTTTTCGGCGA ATGTCGTCTT CACAGTATAA CCAGATTGCT TGGGGT'ATA T
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(SEQ ID NO 111)

Figure 37

ATCGAAGACA TCAGCTTCTT CATAAGTATC CACACGAATT GCTTGATTCA TAGTCGAACG AATGCTGTAA
CGCGACCCGT GTTATAGGTC TGTAAGCTCAG TTGGTTAGAG CGCACCCCTG ATAGGGTGA GGTCCGGCAGT
TCAAATCTGC CCAGACCTAC CAATTGCTTG GTCGAGAAGA ATACGGGGCC ATAGCTCAGC TGGGAGAGCG
CCTGCCCTGC ACGCAGGAGG TCAGCGGTTT GATCCCGCTT GGCTCCACCA CTCCTCTCGTG TTGCGGTGAG
TGTTAAAGAG TTCAGAAATG ATGCCGCTTC AGGTTTGTCC TGTGAGTGC TGATTTCTGG TCTTTTGACC
GGTACGAAAA TCGTCTTTA AAAATTGGA TATGTGATAG AAGTGACTGA TTAATTGCTT TCACTGGCAA
TTGATCTGGT CAAGGTAAAA TTTGTAGTTC TCAAGACGCA AATTTCGGC GAATGTCGTC TTCACGATTG
AGACAGTAAC CAGATTGCTT GGGTTATAT

37/103

(SEQ ID NO 112)

38/103

Figure 38

ATCGAAGACA CCGGCTTCGT CATAAGCTCC CACACGAATTT GCCTTGATTC CA CTTCGGAAG GCGATTTGGGT
TTAGACCCGA GAGTAACGAT TGGGTCTGTA GCTCAGTTGG TTAGAGCGCA CCCCTGATAA GGTGAGGTC
GGCAGTTCGA ATCTGCCCAG ACCCACCAAT CGAAGGGCC ATAGCTCAGC TGGGAGAGCG CCTGCTTTGC
ACGCAGGAGG TCAGCGGTC GATCCCGCTT GGCTCCACCA TTAACCTCTAG TCGCCGAAAG CTCAGAAATG
AGTGTTTACC AGGATGAGGT TGATTGCCCTG GGTGAACAT TGATTCTGG ACTTTGCGCC AGAACTGTTT
TTTAAAAATT TGGGTATGTG ATAGAAGTAG ACCGATGTGT TGCTTTCACT GGCAGCATGT CGCGTCAAGG
TAAATTTGC GTGTTCTCTA TGCAAAATTT CGCGAATGT CGTCTTCACG TTATAGACAG TAACCAGATT
GCTTGGGGTT ATAT

(SEQ ID NO 113)

39/103

Figure 39

ATCGAAGACT TCAGCTTCTT CATAAGTTCC CACACGAATT GCTTGATTCA CTTGCGAAAA GCGATTGGGT
TGAGACCCGA GAGTGACGAT TGGTCTGTA GCTCAGTTGG TTAGAGCGCA CCCCTGATAA GGGTGAGGTC
GGCAGTTCGA ATCTGCCCAG ACCCACC AAT TGTCGGGATG GCCAGTGTC AATGGGCCA TAGCTCAGCT
GGGAGAGCGC CTGCTTTGCA CGCAGGAGGT CAGGAGTTCC ATCCTCCTTG GCTCCACCAT CAACTCACGA
TCGCTGAAAG CTCAGAAATG AACATTGGTA GTTCAATGTT GATTCTCTGGT CTTTGCGCCA GAACTGTTCT
TTAAAAAATT GGGTATGTGA TAGAAGTGAC TAACAGCGTG TTTCACCTGCA CGTTGTTAAT CAAGGCAAAA
TTTGCGAGTT CAAGCGCGAA TTTTCGGCGA ATGTCGTCTT CACGTTACGA ATCTATAACC AGATTGCTTG
GGTTATAT

(SEQ ID NO 114)

40/103

Figure 40

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ATCGACGACA TCAGCTGTCT CATAAGCTCC CACACGAATT GCTTGATTCA TTGAAGAAGA CGATTAGGTT
AGCAACCTTC GATTGGGTCT GTAGCTCAGT TGGTTAGAGC GCACCCCTGA TAAGGGTGAG GTCGGCAGTT
CGAATCTGCC CAGACCCACC AATTGCTGG GGCCATAGCT CAGCTGGGAG AGCGCCCTGCC TTGCACGCAG
GAGGTCAGCG GTTCGATCCC GCTTGGCTCC ACCACCCCGC TTGCCAGTTT GTCAAAAGCTT AGAAAATGAAT
ATTCCGCTCG AATATTGATT TCTGAACTTT ATCAGAAATCG TTCTTTAAAA ATTTGGGTAT GTGATAGAAA
GATAGACTGG ACAGCACTTT CACTGGGTGT TGTTCAGGCT AAGGTAAAAAT TTGTGAGTAA TTACAAGTTT
TCGGCGAATG TTGTC'TTCAC AGTATAACCA GATTGCTTGG GGTTT'N'TAT
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(SEQ ID NO 115)

41/103

Figure 41

TAAGGAAAAG GAAACCTGTG AGTTTTCGTT CTTCTCTGTT TGTTCAGTTT TGAGAGGTTA ATTCTTCTCT
ATACTGTTTG TTCCTTGAAA ACTAGATAAG AAAGTTAGTA AAGTTAGCAT AAATAGGTAA CTATTTTATGA
CACAAAGTAAC CGAGAATCAT CTGAAAGTGA ATCTTTCATC TGATTGGAAG TATCATCGCT GATACGAAAA
ATCAGAAAAA CAACCTTTAC TTCATCGAAG TAAATT

(SEQ ID NO 116)

42/103

Figure 42

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CTAAGGAAAA GGAAACCTGT GAGTTTTCGT TCTTCTCTAT TTGTTTCAGTT TTGAGAGGTT AGTACTTCTC
AGTATGTTTG TTCTTTGAAA ACTAGATAAG AAAGTTAGTA AAGTTAGCAT AGATAATTAA TTATTTTATGA
CACAAAGTAAC CGAGAATCAT CTGAAAGTGA ATCTTTCATC TGATTGGAAG TATCATCGCT GATACGGAAA
ATCAGAAAAA CAACCTTTAC TTCGTAGAAG TAAATT
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(SEQ ID NO 117)

43/103

Figure 43

TAAGGAAAAG GAAACCTGTG AGTTTTCGTT CTTCCTCTGTT TGAGAGGTTA TTACTTCTCT
GTATGTTTGT TCTTTGAAAA CTAGATAAGA AAGTTAGTAA AGTAGTGTA CTATTATGA
CACAAAGTAAC CGAGAATCAT CTGAAAGTGA ATCTTTCATC TATCATCGCT GATACAGACA
ATTAGAAAAA CAACCTTTAC TTCGACGAAG TAAATT

(SEQ ID NO 118)

44/103

Figure 44

GGCCTATAGC TCAGCTGGTT AGAGCGCACG CCTGATAAGC GTGAGGTCGA TGGTTCGAGT CCATTTAGGC
CCACTTTTTC TTTCTGACAG AAGAAACACT GTATAACCTA TTTAAGGGGC CTAGCTCAG CTGGGAGAGC
GCCTGCTTTG CACGCAGGAG GTCAGCGGTT CGATCCCGCT AGGCTCCACC AAAATTGTC TTTGAAAACCT
AGATAAGAAA GTTAGTAAAG TTAGCATAA TAGGTAATA TTTATGACAC AAGTAACCGA GAATCATCTG
AAAGTGAATC TTTCATCTGA TTGGAAGTAT CATCGCTGAT ACGAANAATC AGAANAACAA CCTTTACTTC
ATCGAAGTAA ATT

(SEQ ID NO 119)

45/103

Figure 45

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TAAGGAAAAG GAAACCTGTG AGTTTTCGTT CTTCCTCTATT TGTTCAGTTT TGAGAGGTTA CTCTCTTTTA
TGTCAGATAA AGTATGCAAG GCACTATGCT TGAAGCATCG CGCCACTACA TTTTGTGACGG GCCTATAGCT
CAGCTGGTTA GAGCGCACGC CTGATAAGCG TGAGGTCGAT GGTTGAGTC CATTAGGCC CACTTTTCT
TTCTGACATA AGAAATACAA ATAATCATAC CCTTTACGG GGCTTAGCT CAGCTGGGAG AGCGCCTGCT
TTGCACGCAG GAGGTCAGCG GTTCGATCCC GCTAGGCTCC ACCAAATATG TTCCTTGA AAA ACTAGATAAG
AAAGTTAGTA AAGTTAGCAT AGATAATTAA TTATTTATGA CACAAGTAAC CGAGAAATCAT CTGAAGAAGA
ATCTTTCATC TGATTGGAAG TATCATCGCT GATACGGAAA ATCAGAAAAA CAACCTTTTAC TTTCGTTAGAAG
TAAATT
```

(SEQ ID NO 120)

Figure 46

TAAGGAAAAG GAAACCTGTN AGTTTNCGTN CTTCTCTGTT TGTNCAGTTT TNAGAGGTTA CTCTCTTTNA
TGTCAGATAA GTACGCACG GCACGTTGCC TTGGGCAAG AGCCACTACA TTATTGACGG GCCTATAGCT
CAGCTGGTTA GAGCGCACGC CTGATAAGCG TGAGGTCGAT GGTTCGAGTC CATTTAGGCC CACTTTTCT
TTCTGACAGA AGAAATCATT TGCACATCCT ATTAATAAG GNCCTTAGCT CAGCTGGGAG AGCGCCTGCT
TTGCACGCAG GAGGTCAGCG GTTCGATCCC GCTAGGCTCC ACCCAAAATT GTTCTTTGAA AACTAGATAA
GAAAGTTAGT AAAGTTAGCA TAAGTAGTAT AACTATTTAT GACACAAGTA ACCGAGAAATC ATCTGAAAAGT
GAATCTTTCA TCTAATTCCA CGTATCATCG CTGATACAGA CAATTNGAAA AACAAACCTTT ACTTCGACGA
AGTAAATT

(SEQ ID NO 121)

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Figure 47

TAAGGATAAG GATAACTGTC TTAGGACGGT TTGACTAGGT TGGGCAAGCG TTTTTTTAAAT CTTGTATTCT
ATTCCCTTTTG CATTGTTAAG CGTTGTTCC AAAACATTTA GTTTACGATC AAGTAGTTA TGFAAATAAT
ATGGTAACAA GTAAATTCAC ATATAATAAT AGACGTTAA GAATATATGT CTTTAGGTGA TGTTAACTTG
CATGGATCAA TAATTACA

(SEQ ID NO 122)

48/103

Figure 48

TAAGGATAAG GAAGAAGCCT GAGAAGGTTT CTGACTAGGT TGGGCAAGCA TTTATATGTA AGAGCAAGCA
TTCTATTTC A TTTGTGTTGT TAAGAGTAGC GTGGTGAGGA CGAGACATAT AGTTTGTGAT CAAGTATGTT
ATTGTAAGA AATAATCATG GTAACAAGTA TATTTCACGC ATAATAANTAG ACGTTTAAGA GTATTGTCT
TTTAGGTGAA GTGCTTGCAT GGATCTATAG AAATTACA

(SEQ ID NO 123)

49/103

Figure 49

CAAAATGGAGT TTTTATTTT TATTATCCTT AAACACCCAT TAATTTTTC GGTGTTAAA CCCAAATCAA
TGTTTGGTCT CACAACTAAC ACATTGGTC AGTTGTATC CAGTCTGAA AGAATGTTTT TGAACAGTTC
TTTCAAAAC T GAAACGACA ATCTTCTAG TTCCAAAAT AATACCAA GGATCAATAC AATAAGTTAC
TAAGGGCTTA TGGT

(SEQ ID NO 124)

50/103

Figure 50

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CTAATGAAGT TTTTACTTT TTCTTTTCAT CTTTAATAAA GATAAATACT AAACAAAACA TCAAAATCCA  
TTTATTATC GGTGGTAAAT TAAACCCAAA TCCCTGTTTG GTCTCACAAC TAACATATTT GGTGAGATTG  
TATCCAGTTC TGAAGAACA TTTCCGCTTC TTTCAAAACT GAAACGACA ATCTTCTAG TTCCAATAA  
ATACCAAAGG ATCAATACAA TAAGTTACTA AGGCCTTATG GT
```

(SEQ ID NO 125)

Figure 51

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AACGAAAGAT TGACGATTGG TAAGAAATCCA CAACAAGTTG TTCTTTCATAG ATGTATCTGA GGGTCTGTAG
CTCAGTTGGT TAGAGCACAC GCTTGATAAG CGTGGGGTCA CAAGTTCAAG TCTTGTCAGA CCCACCATGA
CTTTGACTGG TTGAAGTTAT AGATAAAAGA TACATGATTG ATGATGTAAG CTGGGGACTT AGCTTAGTTG
GTAGAGCGCC TGCTTTGCAC GCAGGAGGTC AGGAGTTCGA CTCCTCCTAGT CTCACCCAGA ACTTAAGATA
AGTTCGGATT ACAGAAATTA GTAAATAAAG ATTGAGATCT TGGTTTATTA ACTTCTGTGA TTTTCATTATC
ACGGTAATTA GTGTGATCTG ACGAAGACAC ATTAATCTAT TAACAGATTG GCAAAATTGA GTCTGAAAATA
AATTGTTTAC TCAAGAGTTT AGGTTAAGCA ATTAATCTAG ATGAATTGAG AACTAGCAAA TTAACCTGAAT
CAAGCGTTTT GGTATGTGAA TTTAGATTGA AGCTGTACAG TGCCTTAAGTIG CACAGTGCCTC TAAACCTGAAA
TGTTGAAGTT ACTAACTTGT AGGTAACATC GACTGTTTGG GGTTCGTAAT

(SEQ ID NO 126)

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Figure 52

AACGAAAGAT TGACGATTGG TAAGAAATCCA CGACAAGTTG TTCTTCATAG ATGTATCTGA GGGTCTGTAG
CTCAGTTGGT TAGAGCACAC GCTTGATAAG CGTGGGGTCA CAAAGTCAAG TCTTGTTCAGA CCCACCATGA
CTTTGACTGG TTGAAGTTAT AGAAAGAAG ATACATAACT GATGATGTAA GCTGGGGACT TAGCTTAGTT
GGTAGAGCGC CTGCTTTGCA CGCAGGAGGT CAGGAGTTCTG ACTCTCCTAG TCTCCACCA

(SEQ ID NO 127)

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Figure 53

AACGAAAGAT TGATGGCCGG TAAGAAATCCA CAACAAGTTG TTCTTCGAAG ATGTATCTGA GGGTCTGTAG
CTCAGTTGGT TAGAGCACAC GCTTGATAAG CGTGGGGTCA CAAGTTCAAG TCTTGTGAGA CCCACCAAAT
CTGAAAGATA TGTCGTTTCAT TATGATTAAA GCTGGGGACT TAGCTTAGTT GGTAGAGCGC CTGCTTTGCA
CGCAGGAGGT CAGGAGTTTCG ACTCTCCTAG TCTCCACCA

(SEQ ID NO 128)

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Figure 54

AACGAAAGAT TGACGATTGG TAAGAAATCCA CAACAAGTTG TTCTTCATGA CGATGTATCT GAGGGTCTGT
AGCTCAGTTG GTTAGAGCAC ACGCTTGATA AGCGTGGGGT CACAAGTTCA AGTCTTGTCA GACCCACCAA
ATCTGACTAA CAAGCATTAT TAAATGCTGA ATACAGAAAA ACAGAGACAT TGACTTATTG ATAAGCTGGG
GACTTAGCTT AGTTGGTAGA GCGCCTGCTT TGCACGCAGG AGGTCAGGAG TTCGACTCTC CTAGTCTCCA
CCA

(SEQ ID NO 129)

55/103

Figure 55

AACGAAAGAT TGGTGACCCG TAAGAAATCCA CAACAAGTTG TTCTTCGAAG ATGTATCTGA GGGTCTGTAG
CTCAGTTGGT TAGAGCACAC GCTTGATAAG CGTGGGGTCA CAAGTTCAAG TCTTGTCTAGA CCCACCACTA
CTGACGGAAGT GATGAATAAT CACAAGCTGC TAGATGAAAA GATATGTCTGTC TCATTATGAT TAAAGCTGGG
GACTTAGCTT AGTTGGTAGA GCGCCTGCTT TGCACGCAGG AGGTCAGGAG TTCGACTCTC CTAGTCTCCA
CCA

(SEQ ID NO 130)

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Figure 56

TAAGGAAGAT CGAGAAATTGG AAAGAGGTCG GATTATCCG GATGATCCTT CTCCATCTTA TTAGAACATA
GATCGCAGGC CAGTCAGCCT GACGATCGCT TGCAGGCGTG CCGCCTTCGT TTCTCTTTCT TCATTGTTGA
TTGCTCACGG GCCGTACCGC AGCTGACGCT GCTGGCCCTG CGCAGGCGCG GCCCATCAGG GCCGACGGCC
GGTCGGCCTT GCNAAGCTTC GCTTCGGGT GGATCTGTGG ATCGCGTAGT AGCGTTTGGG TCGGTATCTG
GGCTGTAGC TCAGTTGGTT AGAGCACACG CTTGATAAGC GTGGGGTCGG AGGTTCAAGT CCTCCAGGC
CCACCAAGTT ACTTGATGAG GGGCCGTAGC TCAGCTGGGA GAGCACCTGC TTTGCAAGCA GGGGGTCGTC
GGTTCGATCC CGTCCGGCTC CACCATCATG TTGGTGTGA GACGGATATT GGCAATCAAC AAAAGAAAGA
AACAAAGTTG CGGACTNNTA CGAAAGTCTG CCTGTTCTGT ATGAAATCGT GAAGAGAAGA TGTAAATCGGA
TCAACTGAAG AGTTGATGTC GCAAGAAGCT TGCTCAAGCC TTGCATAATG ATTGATGTGT TTAACCGCCA
TCACCGATTG TATCTCGAGA AGCTGGTCTT TCTGCTGATA CTGTTGAAAC GAGCATTTGC AGTCGAATGG
CAACATTCCG CGTCGCATAA TCGGGCTTTA AGAGCTGAGT TTTGATGGAT ATTGGCAATG AGAGTGATCA
AGTGCTTAA GGGCATTTGGT GGATGCCCTG GCATGCAC

(SEQ ID NO 131)

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Figure 57

TAAGGAGGAT CGAGAAATTGG AAAGAGGCCG GATTATCCG GATGATCCTT CTCCATCTTA TTAGAACATA
GATCGCAGNC CAGTCAGCCT GACGATCGCT TGCAGGCGTG CCGCCTTCGT TTCCTCTTCT TCAATTGTTGA
TTGCTCACGG GCCGTACCGC AGCTGACGCT GCTGGCCCTG CGCAGGCGCG GNCCATCAGG GCCGACGGCC
GGTCGGCCTT GCGAAGCTTC GCTTCGGGT GGATCTGTGG ATCGCGTAGT AGCGTTTGGC TCGGTATCTG
GGCTTGAGC TCAGTTGGTT AGAGCACACG CTTGATAAGC GTGGGTCGG AGGTTCAAAGT CCTCCCAGGC
CCACCAAGTT ACTTGATGAG GGGCCGTAGC TCAGCTGGGA GAGCACCTGC TTTGCAAGCA GGGGTCTGTC
GGTTCGATCC CGTCCGGCTC CACCATCATG TTGGTGTGTA GACGGATATT GGCAATCAAC AAAAGAAAGA
AACAAAGTTG CGGACTNNTA CGAAAGTCTG CCTGTTCTGT ATGAAATCGT GAAGAGAAAGA TGFAATCGGA
TCAACTGAAG AGTTGATGTC GCAAGAAGCT TGCTCAAGCC TTGCATTAATG ATTGATGTGT TTAACCGCCA
TCACCGATTG TATCTCGAGA AGCTGGTCTT TCTGCTGATA CTGTTGAAAC GAGCATTTGC AGTCGAATGG
CAACATTCCG CGTCGCATAA TCGCGCTTA AGAGCTGAGT TTTGATGGAT ATTGGCAATG AGAGTGATCA
AGTGCTTAA GGGCATTTGGT GGATGCCCTG GCATGCAC

(SEQ ID NO 132)

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Figure 58

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CCTTAAAGAA CTGTTCTTTG CAGTGCTCAC ACAGATTGTC TGATGAAAAG TAAATAGCAA GCGTCTTG  
GAAGCAGACT GATACGTCCC CTTCGTCTAG AGGCCCAGGA CACCGCCCTT TCACGGCGGT AACAGGGGT  
CGAATCCCCT AGGGACGCC ACTTGCGCGG TAATGTGTGA AAGCGTTGCC ATCAGTATCT CAAAACTGAC  
TTACGAGTCA CGTTTGAGAT ATTTGCTCTT TAAAAATCTG GATCAAGCTG AAAATTGAAA CACAGAACAA  
CGAAAGTTGT TCGTGAGTCT CTCAAATTTT CGCAACACGA TGATGAATCG TAAGAAACAT CTCGGGTG  
TGA
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(SEQ ID NO 133)

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Figure 59

CCTTAAAGAA CTGTTCTTTG CAGTGCTCAC ACAGATTGTC TGATGAAAAA CGAGCAGTAA AACCTCTACA
GGCTTGTAGC TCAGGTGGTT AGAGCGCACC CCTGATAAGG GTGAGGTCGG TGGTTCAAGT CCACTCAGGC
CTACCAAATT TTCCCTGAAT ACTGCCGTTGT GAAATAACTC ACATACTGAT GTATGCTTCG TTATTTCCACG
CCTTGCTCTCA GGAAAAATTA TCGGTAAAGA GGTTCTGACT ACACGATGGG GCTATAGCTC AGCTGGGAGA
GCGCCTGCTT TGCACGCAGG AGGCTGCGG TTCGATCCCG CATAGCTCCA CCATATCGTG AGTGTTTACG
AAAAAATACT TCAGAGTGTA CCTGAAAGGG TTCACCTGCCA AGTTTGTCTC TTTAAAAATC TGGATCAAAGC
TGAAAAATTGA AACACAGAAC AACGAAACTT GTTCGTGAGT CTCTCAAAAT TTCGCAACAC GATGATGAAT
CGTAAGAAAC ATCTTCGGGT TGTGA

(SEQ ID NO 134)

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Figure 60

CCTTAAAGAA GCGTACTTTG CAGTGCTCAC ACAGATTGTC TGATGAAAAG TAAATAGCAA GGCGTCTTGC
GAAGCAGAÇT GATACGTCCC CTTCTGTCTAG AGGCCCAGGA CACCGCCCTT TCACGGCGGT AACAGGGTTT
CGAATCCCCCT AGGGGACGCC ACTTGCGCGG TAATGTGTGA AAGCGTIGCC ATCAGTATCT CAAAAC TGAC
TTACGAGTCA CGTTTGAGAT ATTTGCTCTT TAAAATCTG GATCAAGCTG AAAATTGAAA CACAGAACAA
CGAAAGTTGT TCGTGAGTCT CTCAAATTTT CGCAACACGA TGATGAATCG TAAGAACAAT CTTCGGGTTG
TGA

(SEQ ID NO 135)

61/103

Figure 61

CCTTAAAGAA CTGTTCTTTG AAGTGCTCAC ACAGATTGTC TGATGAAAAA CGAGCAGTAA AACCTCTACA
GGCTTGAGC TCAGGTGGTT AGAGCGCACC CCTGATAAGG GTGAGGTCGG TGGTTCAAGT CCACTCAGGC
CTACCAAATT TTCCCTGAAT ACTGCGTTGT GAAATAACTC ACATACTGAT GTATGCTTCG TTATTCCACG
CCTTGCTCA GGAAAAATTA TCGGTAAAGA GGTCTGACT ACACGATGGG GCTATAGCTC AGCTGGGAGA
GCGCCTGCTT TGCACGCAGG AGTCTGCGG TTCGATCCCC CATAGCTCCA CCATCTCGTG AGTGTTTACG
AAAAAATACT TCAGAGTGTA CCTGAAAGGG TTCACCTGCCA AGTTTTCCTC TTTAAAAATC TGGATCAAGC
TGAAAAATTGA AACACAGAAC AACGAAAGTT GTTCGTGAGT CTCTCAAAATT TTCGCAACAC G

(SEQ ID NO 136)

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Figure 62

CCTTAAAGAA GCGTACTTTG AAGTGCTCAC ACAGATTGTC TGATGAAAAG TGAATAGCAA GCGTCTTGC
GATTGAGACT TCAGTGTCCC CTTCGTCTAG AGGCCCAGGA CACCGCCCTT TCACGGCGGT AACAGGGTT
CGAATCCCCT AGGGACGCC AGCGTTCAAA CTGATGAGGT CAAACCTCCA GGGACGCCAC TTGCTGGTT
GTGAGTGAAA GTCACCTGCC TTAATATCTC AAACTGACT TACGAGTCAC GTTTGAGATA TTTGCTCTTT
AAAAATCTGG ATCAAGCTGA AAATTGAAAC ACAGAACAAAC GAAAGTTGTT CGTGAGTCTC TCAAATTTTC
GCAACACGAT GATGAATCGT AAGAAACATC TTCGGGTTGT GA

(SEQ ID NO 137)

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Figure 63

CCTTAAAGAA ACGGTCTTTG AAGTGCTCAC ACAGATTGTC TGATGAAAAA CGAGCAGTAA AACCTCTACA
GGCTTGTAGC TCAGGTGGTT AGAGCGCACC CCTGATAAGG GTGAGGTCGG GTGTTCAAGT CCACTCAGGC
CTACCAAATT TTCCCTGAAT ACTGCGTTGT GAAATAACTC ACATACTGAT GTATGCTTCG TTATTCCACG
CCTTGCTCA GGAAAAATTA TCGGTAAAGA GGTCTGACT ACACGATGGG GCTATAGCTC AGCTGGGAGA
GCGCCTGCTT TGCACGCAGG AGGTCTGCGG TTCGATCCCG CATAGCTCCA CCATCTCGTG AGTGTTTACG
AAAAAATACT TCAGAGTGTA CCTGAAAGGG TTCACCTGCGA AGTTTGTCTC TTTAAAAATC TGGATCAAGC
TGAAAAATTGA AACACAGAAC AACGAAAGTT GTTCGTGAGT CTCCTCAAAAT TTCGCAACAC GATGATGAAAT
CGTAAGAAAC ATCTTCGGGT TGTGA

(SEQ ID NO 138)

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Figure 64

CTAAGGATAT ATTCGGAACA TCCTCTTCGG AAGATGCCGA ATAACGTGAC ATATTGTATT CAGTTTGAA
TGTTTATTA ACATTCAAAT ATTTTGTGT TAAAGTGATA TTGCTTTTGA AAATAAGCA GTATGCCGAGC
GCTTGACTAA AAAAAATTGT ACATTGAAA CTAGATAAGT AAGTAAAAATA TAGATTTTAC CAAGCNAAAC
CGAGTGAATA AAGAGTTTA AATAAGCTTG AATTCATAAG AAATAATCGC TAGTGTTTCA AAGAACAATC
ACAAGATTAA TAACGCGTTT AAATCTTTT ATAAAAGAAC GTTAACGTTT GACTTATAA
AATGGTGAA ACATA

(SEQ ID NO 139)

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Figure 65

CTAAGGATAT ATTCCGGAACA TCTTCTTCAG AAGATGCCGA ATAACGTGAC ATATTGTATT CAGTTTGGAA
TGTTTATTTA ACATTCAAAAT ATTTTTCGCT TAAAGTGATA TTGCTTTATGC GAGCNCCTTGA CAATCTATTC
TTTCTTAAAGA AAGCGCTTGT CAGACAAATGC ATTAAGAAAA ATTAAGGCGG AGTTTACCTT TGTAATAAGAG
CATTTGATTT TTTGAAAAATA AAGCAGTATG CGAGCGCTTG ACTAAAAAGA AATTGTACAT TGAANAACIAG
ATAAGTAAGT AAAATATAGA TTTTACCAAG CAAAACCGAG TGAAATAAGA GTTTTAAATA AGCTTGAAAT
CATAAGAAAT AATCGCTAGT GTTCGAAAGA AACTCACAA GATTAATAAC GCGTTTAAAT CTTTATTATA
AAGAAAACGT TTAGCAGACA ATGAGTTAAA TTATTTTAAA GCAGAGTTTA CTTATGTAAA TGAGCATTTA
AAATAATGAA AACGAAGCCG TATGTGAGCA TTGACTTAT AAAAATGGTG GAAACATA

(SEQ ID NO 140)

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Figure 66

CTAAGGATAT ATTCGGAACA TCTTCTTCAG AAGATGCGGA ATAACGTGAC ATATTGTATT CAGTTTGGAA
TGTTTATTA ACATTCAAAT ATTTTGTGGT TAAAGTGATA TTGCTTATGC GAGCGCTTGA CAATCTATTC
TTTTTAAAGA AAGCGGTTGT CAGACAAATGC ATTAAGAAAA ATTAAGCGG AGTTTACTTT TGTAATGAG
CATTGATTT TTTGAAAAATA AAGCAGTATG CGAGCGCTTG ACTAAAANGA AATTGTACAT TGA AAAACTAG
ATAAGTAAGT AAAATATAGA TTTTACCAAG CAAAACCGAG TGAATAAAGA GTTTTGAATA AGCTTGAATT
CATAAGAAAT AATCGCTAGT GTTCGAAAGA AACTCACAA GATTAAATAC GCGTTTAAAT CTTTTTATAA
AAGAACGTAA CTTCATGTTA ACGTTTGACT TATAAAAATG GTGGAAACAT A

(SEQ ID NO 141)

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Figure 67

CTAAGGATAT ATTCCGGAACA TCTTCTTCAG AAGATGCGGA ATAACGTGAC ATATTGTATT CAGNTTTGAA
TGTTTATTTA ACATTCAAAA AATGGGCCCTA TAGCTCAGCT GGTTAGAGCG CACGCCCTGAT AAGCGTGAGG
TCGGTGGTTC GAGTCCACTT AGGCCACCCA TTATTGTAC ATTGAAAACCT AGATAAGTAA GTAAAAATATA
GATTTACCA AGCAAAACCG AGTGAATAAA GAGTTTAAA TAAGCTTGAA TTCATAAGAA ATAATCGCTA
GTGTTGAAA GAACACTCAC AAGATTAAATA ACGCGTTTAA ATCTTTTAT AAAAGAACGT AACTTCATGT
TAACGTTTGA CTTATAAAA TGGTGGAAAC ATA

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Figure 68

CTAAGGATAT ATTCGGAACA TCTTCYTCAG AAGATGCGGA ATAATGTGAC ATATTGTATT CAGTTTGGAA
TGTTTATTTA ACATTCAAAT ATTTTGTGGT TAAAGTGATA TTGCTTATGC GAGCGCTTGA CTAAAAAGAA
ATTGTACATT GAAACTAGA TAAAGTAAGTA AAANTATAGA TTTTACCAAG CAAAACCGAG TGAAATAAGA
GTTTAAATA AGCTTGAATT CATAAGAAAT AATCGCTAGT GTTCGAAAGA AACTCACAA GATTAAATAC
GCGTTAAAT CTTTATATAA AAGAACGTAA CTTCATGTTA ACGTTTGACT TATAAAAATG GTGGAAACAT

A

(SEQ ID NO 143)

69/103

Figure 69

CTAAGGATAT ATTCGGAACA TCTTCTACGA AGATGAGGGA ATACGCTGAC ATATTGTATT CAGTTTGGAA
TGTTTATTAA CATTCAATTG TACATTGNA AACTAGATAAG TAAGTAAGAT TTTACCAAGC AAAACCGAGT
GAATAGAGTT TTAATAAAGC TTGAATTTCAT AAATAATCGC TAGTGTTCCA AAGACNTCCA CAAGATTAAAT
AACTAGTTT AGCTATTAT TTTGAATAAC AATCAAAAT ATGGTGGGAC ATA

(SEQ ID NO 144)

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Figure 70

AAGGATAAGG AACTGCACAT TGGTCTTGTT TAGTCTTGAG AGGTCTTGAG GGGCCTTAGC TCAGCTGGGA
GAGCGCCTGC TTTGCCACGCA GGAGGTCAGC GGTTGGATCC CGCTAGGCTC CATTGGTGAG AGATCACCAA
GTAATGCACA TTGAAAAATTG AATATCTATA TCAAAATAGTA ACAAGAAAAT AAACCGAAAA CGCTGTAGTA
TTAATAAAGA GTTATGACT GAAAGGTCAA AAAATAA

(SEQ ID NO 145)

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Figure 71

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AAGGAAATGG AACACGTTTA TCGTCTTATT TAGTTTGTAG AGGTCTTGTG GGGCCTTAGC TCAGCTGGGA
GAGCGCCTGC TTNGCACGCA GGAGGTCAGC GGTTGGATCC CGCTAGGCTC CATCAGGATA CANTCCTACT
AAACTTAATA CAAGTGAAGT TGAACACGCA ACTCACTTCC TAGGAAAATA GACAATCTTC GCTTGTGTGC
AAGGCACACA TGGTCAGATT CCTAATTTTC TACAGAAGTT TCGCTAAAGC GAGCGTTGCT TAGTATCCTA
TATAATAGTC CATNGAAAAT TGAATATCTA TATCAAAATC CACGATCTAG AAATAGATTG TGGAAAACGTA
ACAAGAAATT AACCCGNAAA CGCTG
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(SEQ ID NO 146)

72/103

Figure 72

AAGGATAAGG AACTGCACAT TGGTCTTGTT TAGTCTTGAG AGTCTTGTG GGGCCTTAGC TCAGCTGGGA
GAGCGCCTGC TTTGCCACGCA GGAGGTCAGC GGTCGATCC CGCTAGGCTC CATTTGGTGAG AGATCACCAA
GTAATGCACA TTGAAAATTG AATATCTATA TCAAATAGTA ACAAGAAAAT AAACCGAAAC GCTGTAGTAT
TAAAAGAGTT TATGACTGAA AGTCAGAAA ATAA

(SEQ ID NO 147)

73/103

Figure 73

CTAAGGATAT ATTCGGAACA TCTTCTTACG AAGATGCAGG AATAACATTG ACATATTGTA TTCAGNTGTG
AATGCTCATT GGAGNATTCA TNGCATNATT TGGTNCAATTG ACANCTAGAT AAGNAAGTAA AATTATGAT
TTTACCAAGC AAAACCGAGT GAATTAGAGT TNTNNAACAA GCTTTGATTT CAAAAAGAAA TAATCGCTAG
TGTTGGAAG AACACTCACA GATTANTAAC ATCTTGGGTT TTCACCCGAC TTGTTTCGTNT CGAAAGTCAA
AAAA

(SEQ ID NO 148)

74/103

Figure 74

AAGGATAAGG AACTGCCGAT TGGTCTTGTT TAGTCTTGAG AGGTCTTGTT GGGCCTTAGC TCAGCTGGGA
GAGCGCCTGC TTGACGCA GGAGGTCAGC GGTCGATCC CGTAGGCTC CATGGTGAG AGATCACCAA
GTAATGCACA TTGAAAATTG AATATCTATA TCAAAATAGTA ACAAGAAAAT AAACCGAAAA CGCTGTAGTA
TTAATAAGAG TTTATGACTG AAAGGTCAAA AAATAA

(SEQ ID NO 149)

Figure 75

AAGGATAAGG AACTGCCCAT TGGTCTTGTT TAGTCTTGAG AGGTCTTGTC GGGCCTTAGC TCAGCTGGGA
GAGCGCCTGC TTTGCACGCA GGAGGTCAGC GGTCGATCC CGCTAGGCTC CATTGGTGAG AGATCACCAG
GTAATGCACA TTGAAAAATTG AATATCTATA TCAAAATAGTA ACAAGAAAT AAACCGAAAA CGCTGTAGTA
TTAATAAGAG TTTATGACTG AAAGGTCAGA AAAATAA

(SEQ ID NO 150)

Figure 76

AAGGAAAAGG AACTGCGCAT TGGTCTTGTT TAGTCTTGAG AGGTCTTGTT GGGCCTTAGC TCAGCTGGGA
GAGCGCCTGC TTGACACGCA GGAGGTCAGC GGTTTCGATCC CGCTAGGCTC CATTTGGTGAG AGATCACCAA
GTAATGCACA TTGAAAATTG AATATCTATA TCAATAGTA ACAAGAAAAT AAACCGAAAA CGCTGTAGTA
TTAATAAGAG TTTATGACTG AAAGGTCAGA AAATAA

(SEQ ID NO 151)

77/103

Figure 77

AAGGATAAGG AACTGCGCAT TGGTCTTGTT TAGTCTTGAG AGGTCTTGTG GGGCCTTAGC TCAGCTGGGA
GAGCGCCTGC TTTGCGACGCA GGAGGTCAGC GGTCGATCC CGCTAGGCTC CATTGGTGAG AGATCACCAA
GTAATGCACA TTGAAAATTG AATATCTATA TCAAATAGTA ACAAGAAAT AAACCGAAAC GCTGTAGTAT
TAAAAGAGTT TATGACTGAA AGTCAGAAA ATAA

(SEQ ID NO 152)

78/103

Figure 78

AAGGATAAGG AACTGCCGAT TGGTCCTTGT TAGCTTGAG AGGTCTTG TG GGGCCCTTAGC TCAGCTGGGA
GAGCGCCTGC TTGTCACGCA GGAGGTCAGC GGTCGATCC CGCTAGGCTC CATTGGTGAG AGATCACCAA
GTAATGCACA TTGAAAATTG AATATCTATA TCAAAATAGTA ACAAGAAAAT AAACCGAAAC GCTGTAGTAT
TAAAAGAGTT TATGACTGAA AGTCAAAAA TAA

(SEQ ID NO 153)

SUBSTITUTE SHEET (RULE 26)

Figure 72

TAAGGAAGAT CGAGAATTGG AAAGAGGTCG GATTATCCG GATGATCCTT CTCCATCTTA TTAGAACATA
 GATCGCAGGC CAGTCAGCCT GACGATCGCT TGCAGGCGTG CCGCCTTCGT TTCTCTTTCT TCATTTGTTGA
 TTGCTCACGG GCCGTACCGC AGCTGACGCT GCTGGCCCCTG CGCAGGCGCG GCCCATCAGG GCCGAACGGC
 CGGTCGGCCT TGCNAAGCTT CGCTTCGGG TGGATCTGTG GATCGCGTAG TAGCGTTTGC GT'CGGTATCT'
 GGGCTTGTAG CTCAGTTGGT TAGAGCACAC GCTTGATAAG CGTGGGGTCG GAGGTTCAAG TCCTCCCAGG 79/13
 CCCACCAAGT TACTTGATGA GGGGCCGTAG CTCAGCTGGG AGAGCACCTG CTTTGCAAGC AGGGGGTCGT 13
 CGGTCGATC CCGTCCGGCT CCACCATCAT GTTGGTGTG AGACGGATAT TGGCAATCAA CAAAAGAAAAG
 AAACAAGTTT GCGGACTNNT ACGAAAGTCT GCCTGTTCTG TATGAAATCG TGAAGAGAAAG ATGTAATCGG
 ATCAACTGAA GAGTTGATGT CGAAGAAGC TTGCTCAAGC CTTGCATAAT GATTGATGTG TTTAACCGCC
 ATCACCGATT GTATCTCGAG AAGCTGGTCT TTCTGCTGAT ACTGTTGAAA CGAGCATTTG CAGTCGAATG
 GCAACATTCG GCGTCGCATA ATCGGGCTTT AAGAGCTGAG TTTTGATGGA TATTGGCAAT GAGAGTGATC
 AAGTGTCTTA AGGGCATTGG TGGATGCCCTT GGCATGCAC

(SEQ ID NO 154)

Figure 80

AAGGAGCACG ACGAGAAACA CTCCAATTGG TGGGGTGTA GCGGTGAGGG GTTCTCGTCT GTAGTGGACG
GAAGCCGGGT GCACAACAAC AAGCAAGCCA GACACACTAT TGGGTCCCTGA GGCAACATCT CTGTTGGTTT
CGGGATGTTG TCCCACCATC TTGGTGTTGG GGTGTTGGT TTAGAATTTG GATAGTGGTT GCGAGCATCA
ATTGGATGCG CTGCCTTTTG GTGGCGTGT CTGTTGTGCA ATTTATTCT TTGGTTTTTG TGTTTAT

(SEQ ID NO 157)

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Figure 81

AAGGAGCACC ACGAGAAACA CCCCATTGG TGGGGTGTGA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG
AGGGCCGGGT GCACAACAAC AGGCAATCGC CGGACACACT ATTGGGCCCT GAGACAACAC TCGGCCGACT
GAGGTCGACG TGGTGTCCCT CCATCTTGGT GGTGGGGTGT GGTGTTTGAG CATTGAATAG TGGTTGCGAG
CATCTAGCCG GATGCGTTCC CCAGTGGTGC GCGTTCGTCA AAAATGTGTA ATTTTCTTTT TGGTATTGTG
GTTCCG

(SEQ ID NO 158)

Figure 82

AAGGAGCACC ACGAGAAACA CCCCAATTGG TGGGGTGTGA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG
AGGGCCGGGT GCACAACAAC AGGCAATCGC CGGACACACT ATTGGGCCCT GAGACAACAC TCGGCCGACT
GAGGTCGACG TGGTGTCCTT CCATCTTGGT GGTGGGGTGT GGTGT'TTGAG CATTGAATAG TGGTGCAGAG
CATCTAGACG GATGCGTTCC CCAGTGGTGC GCGTTCGTCA AAAATGTGTA ATTTTTC'TT TGGT'TT'TGT
GTTTCGT

(SEQ ID NO 159)

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Figure 83

AAGGAGCACC ACGAGAAACA CCCCAATTGG TGGGGTGTGA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG
AGGNNCGGGT NNACAACAAC NGCCAATCGC CGGACACACT ATTGGGNCCT GAGACAACAC TCGGCCGACT
GAGGTCGACG TGGTGTCCCT CCATCTTGGT GGTGGGGTGT GGTGTTTGAG CATTGAATAG TGGTTGCGAG
CATCTAGCCG GATGCGTTCC CCAGTGGTGC GCGTTCGTCA AAAATGTGTA ATTTTCTNT TGGTTTGTGT
GTTCGT

(SEQ ID NO 160)

84/103

Figure 84

AAGGAGCACCC ACGAGAAACA CTCCAATTGG TGGAGTGTGA GCCGTGAGGG GTCTCGTCT GTAGTGGACG
AGGGCCGGGT GCACAAACAGC AGACAAATCGC CAGACACACT AATTGGGCCCC GAGACAACAC TCGGCCGACT
TTGGTCGACG TGGTGTCCTT CCATCTTGGT GGTGGGGTGT GGTTGTTGAG CATTGAAATAG TGGTTGCCGAG
CATCTAGACG GATGCGTTGC CCTCGGGCCG CGTGTTCGTC AAAAATGTGT AATTTTCTT TTTGGTTTTT
GTGTTTCGT

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Figure 85

AAGGAGCACC ACGAGAAACA CTCCAAATTGG TGGAGTGTGA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG
GGAGCCGGGT GCACAAACAC AGGCAATCGC CAGACACACT ATTGGGCCCC TCGGCCGGCT
TTGAGTCGAA GTGGTGTCCC TCCATCTTGG TGGTGGGTG TGGTGTGA GCAATTGAATA GTGGTTGCCG
GCATCTAGAC GGATGCGTTG CCTTCGGGCC GCGTGTTCGT CAAAAATGTG TAAATTTTTC TTTTGGTTTT
TGTGTTTCGT

(SEQ ID NO 162)

86/103

Figure 86

AGGGAGCACC GNAACGCAT CCCGCGTGGG GTGTGGGTTT GCGTGGTGT GCGTCGGNC CGAGGTGTTG
GGCAGCAGGC AGTAACCNCC GGAACACTGT TGGGTTTGA GNNAACACCC GTGGTGGTGT TGTGCTCCCC
GTGGTGNCGG GGTGTGGTGT TTGAGTGTGT GATAGTGGTT GCGAGCATCT GGCAAGACT GTGGTAAGCG
GTTTTTGTG ANTGTTTCT GGTGTTGT

(SEQ ID NO 163)

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Figure 87

AAGGAGCACC ACGAGAAACA CTCCAATTGG TGGGGTGTGA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG
AGGGNCGGGT GCACAACAAC AGNCAATCGC CAGACACACT ATTGNNCCCT GAGACAACAC TCGGCCGACT
TNGGTTGAAG TGGTGTCCTT CCATCTTGGT GGTGGGGTGT GGTGTTTGAG TATTGGATAG TGGTTGCCGAG
CATCTAANTG AACGCGTCGC CGNCAACGGT TACGTGTTCG TTTTGTGTAA TTNTTCTAT TGGTTTGTGT
GTTCGT

(SEQ ID NO 164)

88/103

Figure 88

AAGGAGCACC ACGAGAAACA CTCCAATTGG TGGGGTGTGA GCCGTGAGGG GTTCCTCGTCT GTAGTGGACG
AGGGCCGGGT GCACAACAAC AGGCAATCGC CAGACACACT ATTGGNCCCT GAGACAACAC TCGGCCGACT
TTGGTCGAAG TGGTGTCGCC CCATCTTGGT GGCGGGGTGT GGTGTTTGAG TATTGGATAG TGGTTGCCGAA
CATCTAAATG AACGCGTTGC CGGCAACGGT TACGTGTTCC TTTTAGTGTA ATTNTTCTA ATGGTTTTTG
TGTTTCGT

(SEQ ID NO 165)

SUBSTITUTE SHEET (RULE 26)

89/103

Figure 89

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AAGGAGCAC  ACGAGACCTG  GGCCGGCCCC  GCAGATCGCG  GGATCAGCTG  AGCTTTCAGG  CGATTCTGTTG
GATGGCCTCG  CACCTGTAGT  GGGTGGGGGT  CTGGTGCACT  CAACAAACTT  GCGGTGGGAT  GCGGGAAGC
ATCTGCGGAA  AATCATCAGA  CACACTATTG  GGCTTTGAGA  CAACAGGCC  GCAGNCCTGN  CCCGTTGGGG
GCAGNGGGTG  TGTGTTGCC  TCACTTTGGT  GGTGGGGGTG  GTGTTTGAAT  TGTGGATAGT  GGTTCGGAGC
ATCTAGCGCG  CAGAAATGTG  GGTCCTCCTC  CTTGTGGGTG  GGGCCTGGTT  TTGTGTGCGA  TTGATGTGCA
ATTCTTTTG  AAACATCAT  TTTGGTTTTT  GTGTTGT
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(SEQ ID NO 166)

90/103

Figure 90

AAGGAGCACC ACGAAAACT CCCCAATTGG TGGGGTGTA A GCCGTGAGGG GTTCCCGTCT GTAGTGGACG
GGGGCCGGGT GCGCAACAGC AAGCGAAACG CCGGACACAC TATTGGGTCC TGAGGCAACA CTCGGGTTTG
TCCCCCTCAG GGATTTCTG GGTGTTGTCC CACCATCTTG GTGGTGGGT GTGGTGTG AGAATTGGAT
AGTGGTTGCG AGCATCAAAT GGATGCGTTG CCCCTACGGG TAGCGTGTC TTTTGTGCAA TTTTATTCNT
TGGTTTTTGT GTTTGT

(SEQ ID NO 167)

91/103

Figure 21

AAGGAGCACC ACGAGAAGCA CTCCAACCTGG TGGGGTGCAA GCCGTGAGGG GTTCTCGTCT GTAGTGGACG
AGAGCCGGGT GCGCGACAAC GAACGAGCCA GACACACTAT TGGGTCCCTGA GGCAACACTC GGGCTTGGCC
AGAGCTGTG TCCCAACCATC TTGGTGGTGG GGTGTGGTGT TTGAGAAATTG GATAGTGGTT GCGAGCATCA
AATGGATGCG TTGCCCCCTAC GGTGGCGTG TTCTTTTGTG CAAATTTAAT CTTTGGTTT TTGTGT'TTGT

(SEQ ID NO 168)

92/103

Figure 92

AAGGAGCACC ACGAAAACA CCCCAACTGG TGGGGTGTA GCGGTGAGGG GCTCCCGTCT GTAGTAGACG
GGCGCCGGGT GCGCAACAGC AAGCGAGCCA GACACACTAT TGGGTCCCTGA GGCAACACTC GGGCTTGTCT
TGGACTCGTC CAAGAGTGTT GTCCCACCAT CTTGGTGGTG GGGTGTGGTG TTTGAGAAAT GGATAGTGGT
TGCGAGCATC ANCTGGATGC GTTGCCCCCA GGGTAGCGT GTTCTTTTGT GCAATTNTAT TCNNTGGTTT
TTGTGTTAGT

(SEQ ID NO 169)

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Figure 93

AAGGAGCACC ACGAAAACA CTCGCGATCC GGTGGGGTGT GAGCCGTGAG GGAGCCCGTG CCTGTAGTGG
GTGTGGGTTG GGTGCGCGAC AACAAATGGG AAAAATCGCT GGGCACACTA TTGGGCTTTG AGGCAACACC
TGGTTTGT TT TGGTGGGTGT CGCTCCATCT TGGTGGTGGG GTGTGGTGT TGAGTTGTGG ATAGTGGTTG
CGAGCATCTA AGCAAAAGCT GTTGTTTGAC GGTTTTGTG GAGTGTTGTG TGTGT

(SEQ ID NO 170)

94/103

Figure 24

AAGGAGCACC ACGAAAAACA CTCCAATTGG TGGGGTGTAAG GCCGTGAGGG GTTCTCATCT GTAGTGGACG
AGAGCCCGGT GCACAACAGC AATGAATCG CCAGACACAC TGTGGGTCC TGAGGCAACA CTCAGGCTTG
TCCCATGTTG GGCTTGATCG GGTGCTGTCC CCCCATCTTG GTGGTGGGT GTGGTGTG AGTATTGGAT
AGTGGTTGCG AGCATCTAAA TGGATACGTT GCCAGTAATG GTGGCGTATT CATTGAAAT GTGTAATTTT
CTTCTTGGT TTTGTGTGT

(SEQ ID NO 171)

95/103

Figure 25

AAGGAGCACC ACGAAAACA CTCCAATTGG TGGGGTGTA GCGGTGAGGG GTTCTCATCT GTAGTGGACG
AGAGCCGGGT GCACAACAGC AATGAATCG CCAGACACAC TGTTGGGTCC TGAGGCAACA CTCAGGCTTG
TCCCATGTTG GGCTTGATCG GGTGCTGTCC CCCCATCTTG GTGGTGGGT GTGGTGTG AGTATTGGAT
AGTGGTTGCG AGCATCTAAA TGGATACGTT GCCAGTAATG GTGGCGTGT CATGAAAT GTGTAATTTT
CTTCTTTGGT TTTGTGTGT

(SEQ ID NO 172)

96/103

Figure 96

AAGGAGCACC ACGAAAACA CTCCAATTGG TGGGGTGTAAGCCGTGAGGG GTTCTCATCT GTAGTGGACG
AGAGCCGGGT GCACAACAGC AATGAATCG CCAGACACAC TGTGGGTCC TGAGGCAACA CTCAGGCTTG
TCCCATGTTG GGCTTGATCG GGTGCTGTCC CCCCATCTTG GTGGTGGGT GTGGTGGT AGTATTGGAT
AGTGGTTGCG AGCATCTAAA TGGANACGTT GCCAGTAATG GTGGCGTGTT CATTGAAAAT GTGTAATTTT
CTTCTTGGT TTTGTGTGT

(SEQ ID NO 173)

97/103

Figure 97

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AAGGAGCACC ATTTCTCAGT CGAATGAACT GAGAACATAA AGCGAGTATC TGTAAGTGGAT ACATGCTTGG
TGAATATGTT TTATAAATCC TGTCCACCCC GTGGATAGGT AGTCGGCAAA ACGTCGGACT GTCATAAGAA
TTGAAACGCT GGCACACTGT TGGTCCTGA GGCAACACAT TGTGTTGTCA CCCTGCTTGG TGGTGGGGTG
TGGTCCTTGA CTTATGGATA GTGGTTGCGA GCATCTAAAC ATAGCCTCGC TCGTTTTCGA GTGAGGCTGG
TTTTTGCAAT TTTATTAGCT
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(SEQ ID NO 174)

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Figure 98

CCTAATGATA TTGATTGCGG TGAAGTGCTC ACACAGATTG TCTGATGAAA AAGTAACGAG CAGAAATACC
TTTATAGGCT TGTAGCTCAG GTGGTTAGAG CGCACCCCTG ATAAGGGTGA GGTCGGTGGT TCAAGTCCAC
TCAGGCCCTAC CACTTCTCGA AGTGGAAAAG GTACTGCACG TGACTGTATG GGGCTATAGC TCAGCTGGGA
GAGCGCCTGC CTTGCACGCA GGAGGTCAGC GGTTCGATCC CGCTTAGCTC CACCATATAG TCCTGTATTT
CAATACTTCA GAGTGTA CTG GCAACAGTAT GCTGCGAAGT ATT'TT'GCTCT TTAACAACTCT GGAACAAGCT
GAAATTTGAA ACATGACAGC TGAACCTTAT CCTTCCGTAG AAGTATTTGGG GTAAGGATTA ACCTGTCTATA
GAGTCTCTCA AATGTAGCAG CACGAAAGTG GAAACACCTT CGGGTTGTGA

(SEQ ID NO 195)

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Figure 29

CCTAATGATA TTGATTCCGG TGAAGTGCTC ACACAGATTG TTTGATAGAA ACGTAATGAG CAAAAGCGCT
ACCTGTTGAT GTAATGAGTC ACTGACTCAT GCTGATACGA ACCGATTAAAG ACAGTCAGTT TAATCGGATT
TTCGTGTCCC CATCGTCTAG AGGCCCTAGGA CACTGCCCTT TCACGGCTGT AACAGGGGTT CGAATCCCCCT
TGGGGACGCC ATTCGATAAT GAGTGAAAGA CATTATCACC GGTCCTTGA ACCGAAAACA TCTTAAAGAT
GACTCTTGCG AGTCGTGTTT AAGATATTGC TCTTTAACAA TCTGGAACAA GCTGAAAATT GAAACATGAC
AGCTGAAACT TATCCCTCCG TAGAAGTATT GGGGTAAGGA TTAACCTGTC ATAGAGTCTC TCAAAATGTAG
CAGCACGAAA GTGGAAACAC CTTCCGGGTTG TGA

(SEQ ID NO 196)

100/103

Figure 100

TAAGGATAAG GAAGAAGCCCT GAGAAGGTTT CTGACTAGGT TGGGCAAGCA TTTATATGTA AGAGCAAGCA
TTCTATTCA TTTGTGTTGT TAAGAGTAGC GCGTGAGGA CGAGACATAT AGTTGTGAT CAAGTATGTT
ATTGTAAGA AATAATCATG GTAACAAGTA TATTCACGC ATAATAATAG ACGTTAAGA GTATTGTCT
TTTAGGTGAA GTGCTTGCAT GGATCTATAG AAATTACA

(SEQ ID NO 197)

101/103

Figure 101

TAAGGATAAG GAAACCTGTG AATCTTTTTC CCTTCTTTTG TTCAGTTTGG AGAGGTTTCAT CTCTCAAAAC
GTGTTCTTTG AAAACTAGAT AAGAAAAGTT AGTGTA AAAA GACGAAGAGA AACCGTAGGT TTTTCTTCAA
CCAAAACCGA GAATCAAACC GAGAAAGAAT CTTTCCGTTT TCATAAGCGA TCGCACGTTT ATGAAAACAC
AACAAACACCT TCGTAAGAAG GATGA

(SEQ ID NO 213)

102/103

Figure 102

TAAGGATAAG GAAACCTGTG AATCTTTTTC CCTTCTTTTG TTCAGTTTGG AGAGGTCAAT GACGCTCATA
CTGAGTACCA GGTGACACGT TTTTGAGGTG TCTCTTCGTA TGAGGGGCCCT ATAGCTCAGC TGGTTAGAGC
GCACGCCCTGA TAAGCGTGAG GTCGGTGGTT CGAGTCCACT TAGGCCCACT TTTTGAATA AACCTTTCTT
TTTTATATGT TAATAAGGGG CCTTAGCTCA GCTGGGAGAG CGCCTGCTTT GCACGCAGGA GGTACGCGGT
TCGATCCCCG TAGGCTCCAC CAAAGATAGT TTGTTCTTTG AAAACTAGAT AAGAAAAGTT AGTGTA AAAA
GACGAAGAGA AACCGTAGGT TTTTCTTCAA CCAAAACCGA GAATCAACC GAGAAAGAAT CTTTCCGTTT
TCATAAGCGA TCGCACGTTT ATGAAAACAC AACACACCTT TCGTAAGAAG GATGA

(SEQ ID NO 214)

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Figure 103

TAAGGATAAG GAAACCTGTG AATCTTTTTC CCTTCTTTTG TTCAGTTTTC AGAGTCAAT GACGTCATA
CTGAGTACCA GGTGACACGT TTTTGAGGTG TCTCTTCGTA TGAGGGGCTT ATAGCTCAGC TGGTTAGAGC
GCACGCCCTGA TAAGCGTGAG GTCGGTGGTT CGAGTCCACT TAGGCCCACT TTTTGTGAATA AACCTTTCTT
TTTTATATGT TAATAAGGGG CCTTAGCTCA CAAAGATAGT TTGTTCTTTG AAAACTAGAT AAGAAAAGTT AGTGTAATAA
TCGATCCCCG TAGGCTCCAC CAAAGATAGT TTGTTCTTTG CCAAAACCGA GAAAGAATCT TTCCGTTTTC ATAAGCGATC
GACGAAAGAGA AACCGTAGGT TTTTCTTCAA CCAAAACCGA GAAAGAATCT TTCCGTTTTC ATAAGCGATC
GCACGTTTAT GAAACACAA CAACACCTTC GTAAGAAGGA TGA

(SEQ ID NO 215)